

* OK TO ENTER *SEMA* 12/13/06

* note: Examiner's Amendment rejoins claim 11 and cancels claims 12-16.

Attorney Docket No. 2004_1543A

Serial No. 10/509,096

November 28, 2006

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently amended) ~~The antibody of claim 1, wherein the hybridoma cell is An~~ antibody specifically recognizing proliferative human hepatocytes that exist in a hepatocyte population isolated from an adult human liver and have clonal proliferative ability and differentiation ability to functional hepatocytes, which antibody is produced by Mouse-Mouse hybridoma K8223 (FERM BP-8334).

3. (Cancelled)

4. (Original) ~~The hybridoma cell of claim 3~~ A hybridoma cell producing the antibody of claim 2, which is Mouse-Mouse hybridoma K8223 (FERM BP-8334).

5-10. (Cancelled)

11. (Withdrawn) A method for isolating proliferative human hepatocytes, which comprises separating cells recognized by the antibody of claim 2, from a human hepatocyte population.

12. (Withdrawn) Proliferative human hepatocytes separated by the method of claim 11.

13. (Withdrawn) A method for inducing the differentiation of the proliferative human hepatocytes of claim 12, which comprises performing at least one of the following means:

- (a) spheroid culture of the proliferative human hepatocytes; and
- (b) transfer of hepatic nuclear factor 4 (HNF4) gene into the proliferative human

hepatocytes.

14. (Withdrawn) Functional human hepatocytes induced to differentiate by the method of claim 13.

15. (Withdrawn) A cell kit comprising the functional human hepatocytes of claim 14.

16. (Withdrawn) A hybrid artificial liver packed with the functional human hepatocytes of claim 15.